Amendment to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Canceled)

2. (Currently amended) A neural implant comprising a device, wherein at least one component of the device ~~is made of~~ comprises a carbon nanofiber material.

3. (Previously presented) The neural implant of claim 2 , wherein the carbon nanofibers are about 2 to 200 nm in width.

4. (Previously presented) The neural implant of claim 3, wherein the carbon nanofibers comprise carbon nanotubes.

5. (Canceled).

6. (Currently amended) The neural implant of claim ~~5~~ 4, wherein the carbon nanotubes are aligned.

7. (Canceled).

8. (Currently amended) The neural implant of claim 2, wherein the nanomaterial comprises a nanocomposite of a carbon nanotube and a polymer matrix selected from the group consisting of polyurethane, polymethacrylate, polyester, polyvinyl and any copolymers thereof.

Claims 9-13. (Canceled)

14. (Previously presented) Use of a neural implant that minimizes scar formation comprising:

(a) obtaining a neural implantable device;

(b) coating the implantable device with a nanomaterial; and

(c) securing the implantable device in the neural tissue.

15. (Previously presented) Use of a neural implant that minimizes scar formation comprising:

(a) obtaining a neural implantable device comprising a nanomaterial; and

(b) securing the implantable device in the neural tissue.

Claims 16-21 (Canceled).

22. (New) The use in accordance with claim 15 wherein said nanomaterial comprises a carbon nanofiber material with nanofibers about 2 to 200 nm in width

23. (New) The use in accordance with claim 22 wherein said carbon nanofibers comprise carbon nanotubes.

24. (New) The use in accordance with claim 15 wherein said nanomaterial is a nanocomposite further comprising a polymer matrix.

25. (New) The use in accordance with claim 23 wherein carbon nanotubes are functionalized with 4-hydroxynonenal.

26. (New) The use in accordance with claim 23 wherein the carbon nanotubes are aligned with one another.

27. (New) A method of minimizing glial scar tissue formation upon implantation of a neural prostheses, said method comprising the step of

implanting a neural prostheses in the neural tissue of a patient, said prostheses comprising a nanocomposite component, wherein said nanocomposite is comprised of a polymer material and a nanomaterial wherein said nanomaterial has a dimension ranging from 5 nm to less than 500 nm.

28. (New) The method of claim 27, wherein said nanomaterial comprises a plurality of nanoparticles disposed on said nanocomposite.

29. (New) The method of claim 27, wherein said polymer is selected from the group consisting of polyurethane, polymethacrylate, polyester, polyvinyl and any copolymers thereof.

30. (New) The A method of minimizing glial scar tissue formation upon implantation of a neural prostheses, said method comprising the step of

implanting a neural prostheses in the neural tissue of a patient, said prostheses comprising a nanomaterial component comprised of a polyurethane (PU)-carbon nanofiber (CN) composite.

31. (New) The method of claim 30, wherein the carbon nanofibers comprises 2% to 100% of the nanocomposite.

32. (New) The method of claim 30 wherein, the carbon nanofibers have a size in the range of about 10 to about 100 nm in width and length.

33. (New) The method of claim 32 wherein the nanofibers are multi-walled nanotubes.

34. (New) The method of claim 30 wherein the polyurethane (PU)-carbon nanofiber (CN) composites have a size in the range of about 50 to 100 nm and the composite comprises about 80:20 by weight percent carbon nanofiber to polyurethane.

35. (New) The method of claim 30 wherein the polyurethane (PU)-carbon nanofiber (CN) composites have a size in the range of about 60 to 100 nm and the composite comprises about 90:10 by weight percent carbon nanofiber to polyurethane.